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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/806,556	03/23/2004	Sarah Jane Mears	EL0508USNA	2562
23906 7590 05/31/2007 E I DU PONT DE NEMOURS AND COMPANY LEGAL PATENT RECORDS CENTER BARLEY MILL PLAZA 25/1128 4417 LANCASTER PIKE WILMINGTON, DE 19805			EXAMINER KOPEC, MARK T	
			ART UNIT 1751	PAPER NUMBER
			MAIL DATE 05/31/2007	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/806,556

Applicant(s)

MEARS, SARAH JANE

Examiner

Mark Kopec

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 20 December 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-16 is/are pending in the application.
- 4a) Of the above claim(s) 4 and 5 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3, 6-16 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

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A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 12/20/06 has been entered.

Claims 1-16 are currently pending with claims 4 and 5 withdrawn from consideration.

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claims 2, 3, and 11-16 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over either Okamoto et al (5,616,173), Carroll et al (5,162,062) or Oba et al (5,670,089).

This rejection is maintained for the reasons set forth in the Rejection mailed 08/26/05 (Pages 4-7).

Applicant's arguments filed 12/20/06 have been fully considered but they are not persuasive.

Applicant's discussion of the claimed invention is noted.

Initially, note that the above rejection(s) have been withdrawn over instant claims 1 and 6-10. The references do not

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disclose or suggest the instant compositions "consisting of" electrically conductive particle and liquid vehicle (i.e. no glass binder).

With respect to instant claims 2 and 11 (and claimed dependant thereon), Okamoto, a careful examination of Okamoto discloses inorganic binder within the claimed range. Each of the compositions disclosed in Table 1 meet the claimed limitations (0.80% glass total, i.e. 0.98 wt% glass with respect to solids). The reference specifically or inherently meets all claimed limitations.

Applicant's discussion of Carroll (pages 7-8 of response) is noted. The examiner respectfully maintains that Carroll discloses compositions containing each of the required ingredients within their required proportions. The examples disclosed in Table 5, which contain frit/Ag in ratios from 0.016-0.026, meet each of **the claimed limitations**. Furthermore, the fact that Carroll teaches the presence of additional components such as sintering inhibitor, or teaches utility a multilayer circuit, does not make the disclosure inapplicable to the instant claims.

With respect to Oba, applicant argues, "The present invention, when inorganic binder is included, does not require a PbO containing frit. The examiner respectfully maintains that

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such binders are not excluded from the above listed instant claims. In fact, the recited Markush group includes several lead containing frits.

Claims 1 and 6-10 are rejected under 35 U.S.C. 102(b) as anticipated by Chacko et al (6,228,288).

Chacko discloses a polymer film conductive composition comprising, based on total composition: (a) 3-20 wt. % of polyamide-imide resin; (b) 0-10 wt. % cyanate ester resin; (c) 40-85 wt. % finely divided metallic electrically conductive particles selected from the group consisting of silver, copper, nickel, silver coated copper, silver coated nickel, carbon black, graphite and mixtures thereof, wherein all of (a), (b) and (c) are dispersed in a 20-40 wt. % organic solvent (Abstract; Col 3, lines 20-25; Col 4, lines 10-20). The conductive paste thus prepared is applied to substrates such as polyimide, ceramic and fiber reinforced phenolic substrates by conventional screen-printing processes. A preferred substrate is polyimide. The wet film thickness typically used for position sensor application is 40 μm (Col 4, lines 33-40). The reference specifically or inherently meets each of the claimed limitations. The disclosure meets the instant requirements of "consisting of" electrically conductive material and liquid

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vehicle and/or "wherein the composition does not contain an inorganic binder".

The reference is anticipatory.

It is noted that applicant has not argued the merits of this rejection in the reply filed 12/20/06.

Note the following new grounds of rejection.

Claims 1 and 6-10 are rejected under 35 U.S.C. 102(b) as anticipated by JP 2000-285731.

JP '731 discloses a conductor paste comprising up to 95 wt% Ag powder, and organic vehicle with no glass frit (Abstract; para 0008 of English trans). Although the reference does not specify the instant claim intended use of "...automotive defogging or defrosting", the compositions are identical. If the body of a claim fully and intrinsically sets forth all of the limitations of the claimed invention, and the preamble merely states, for example, the purpose or intended use of the invention, rather than any distinct definition of any of the claimed invention's limitations, then the preamble is not considered a limitation and is of no significance to claim construction. *Pitney Bowes, Inc. v. Hewlett-Packard Co.*, 182 F.3d 1298, 1305, 51 USPQ2d 1161, 1165 (Fed. Cir. 1999). See also *Rowe v. Dror*, 112 F.3d 473, 478, 42 USPQ2d 1550, 1553 (Fed. Cir. 1997).

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The reference is anticipatory.

Claims 2, 3, and 11-16 are rejected under 35 U.S.C. 102(b) as anticipated by JP 11-120821.

JP '821 discloses a thick-film silver terminated composition contains (a) 60-80 wt.% of silver powder, (b) 0.1-15 wt.% of glass binder having a softening point of 400-650°C and absolute viscosity less than 106 poise at a burning temperature, (c) a 0.1-5 wt.% of negative TCR driver, with (a), (b), (c) dispersed in an organic vehicle (Abstract; claims 1-2; para 0009 of English trans; Table 2). Note the above "intended use" rationale applies to this rejection as well. The reference specifically or inherently meets each of the claimed limitations.

The reference is anticipatory.

In view of the foregoing, the above claims have failed to patentably distinguish over the applied art.

The remaining references listed on forms 892 and 1449 have been reviewed by the examiner and are considered to be cumulative to or less material than the prior art references relied upon in the rejection above.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mark Kopec whose telephone number is (571) 272-1319. The examiner

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can normally be reached on Monday - Friday from 9:30 AM to 6:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Douglas McGinty can be reached on (571) 272-1029. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Mark Kopec/
Primary Examiner
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MK
May 21, 2007